

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (previously presented) A video encoder for receiving input pictures and providing compressed stream data, the encoder comprising:
 - a normal encoding portion for receiving input pictures and providing normal stream data;
 - a lower-quality encoding portion for receiving input pictures and providing channel change stream data; and
 - a multiplexor in signal communication with each of the normal and lower-quality portions for receiving and combining the normal and channel change data streams
2. (previously presented) A video encoder as defined in Claim 1, further comprising a low-pass filter in signal communication with the lower-quality encoding portion for providing low-pass filtered input pictures to the lower-quality encoding portion.
3. (previously presented) A video encoder as defined in Claim 1, further comprising a downsampling unit in signal communication with the lower-quality encoding portion for providing downsampled input pictures to the lower-quality encoding portion.
4. (original) A video encoder as defined in Claim 1, further comprising means for creating a channel change stream with more frequent intra-coded pictures in the channel change stream than in a corresponding normal stream.
5. (original) A video encoder as defined in Claim 4, further comprising means for downsampling to create lower resolution channel change stream pictures.

6. (original) A video encoder as defined in Claim 1, further comprising means for encoding redundant picture syntax in compliance with the JVT standard.

7. (original) A video encoder as defined in Claim 1, further comprising means for encoding channel change pictures into user data of corresponding normal stream pictures.

8. (original) A video encoder as defined in Claim 1, further comprising means for signaling to a decoder whether to use normal stream or channel change stream pictures for subsequent channel change stream intra-coded pictures.

9. (original) A video encoder as defined in Claim 1, further comprising a picture selector in signal communication with the lower-quality encoding portion for selecting a subset of the input pictures to code in the channel change stream.

10. (previously presented) A video encoding method for receiving input pictures and providing compressed stream data, the method comprising:

receiving input pictures;
encoding normal stream data from the received input pictures;
encoding channel change stream data from the received input pictures wherein the channel change stream data comprises lower-quality encoded data than the normal stream data;
and

multiplexing the normal and channel change data streams into a combined output stream.

11. (original) A video encoding method as defined in Claim 10, further comprising at least one of:

creating a channel change stream with more frequent intra-coded pictures in the channel change stream than in a corresponding normal stream;
downsampling to create lower resolution channel change stream pictures;
encoding redundant picture syntax in compliance with the JVT standard;

encoding channel change pictures into user data of corresponding normal stream pictures;
and

signaling to a decoder whether to use normal stream or channel change stream pictures
for subsequent channel change stream intra-coded pictures.

12. (original) A video encoding method as defined in Claim 10, further comprising
selecting a subset of the input pictures to code in the channel change stream.

13. (original) A video encoding apparatus for receiving input pictures and providing
compressed stream data, the apparatus comprising:

means for receiving input pictures;

means for encoding normal stream data from the received input pictures;

means for encoding channel change stream data from the received input pictures, wherein
the channel change stream data comprises lower-quality encoded data than the normal stream
data; and

means for combining the normal and channel change data streams into a combined output
stream.

14. (currently amended) A non-transitory digital videodisc encoded with signal data
comprising a plurality of block transform coefficients for a combined stream formed from each
of normal stream and channel change stream data, the coefficients indicative of an original signal
data sequence, the normal stream data of the digital videodisc having coefficients embodying a
normal quality data sequence, and the channel change stream of the digital videodisc having
coefficients embodying a reduced-quality data sequence, the reduced-quality data sequence
comprising at least one additional intra-coded picture.

15. (currently amended) A non-transitory digital videodisc as defined in Claim 14
wherein the reduced-quality data sequence is encoded in the picture user data.